

ABSTRACT OF THE DISCLOSURE

An optical phase modulator includes a bandpass multilayer stack, formed by a plurality of dielectric layers, preferably of GaAs and AlAs, and having a transmission function related to the refractive index of the layers of the stack, for receiving an optical input signal to be phase modulated. A phase modulator device produces a nonmechanical change in the refractive index of each layer of the stack by, e.g., the injection of free carrier, to provide shifting of the transmission function so as to produce phase modulation of the optical input signal and to thereby produce a phase modulated output signal.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail in an envelope addressed to: Commission on Patents and Trademarks, Washington, D.C. 20231 on the date of signature below.

Date: 6-6-01

Signature: _____

Lisa R. Hughes

Express Mail EK828574598US